ISSUE SLIP STAPLE AREA (for additional cross references)

| POSITION | INITIALS | ID NO. | DATE |
|---------------------------|----------|--------|----------|
| FEE DETERMINATION | 18 | | 10 5 0 |
| O.I.P.E. CLASSIFIER | | 21 | 10/9/21 |
| FORMALITY REVIEW | /.V | 5031 | 10-29-01 |
| RESPONSE FORMALITY REVIEW | | | 1 -27-0 |

INDEX OF CLAIMS

| Rejected | N Non-elected |
|--|----------------|
| = Allowed | I Interference |
| (Through numeral) Canceled | A Appeal |
| ÷Restricted | O Objected |

| • | | | | | | | | | | ÷ | | | | | | |
|-----|----------|------------|----------|--------------|-----------|--------------|--------------|-----------|----|--------------|-----------|----------|---------|--------------|----------|----------|
| | ſ | | | | | | | | _ | | | | | | | |
| | } | Clair | <u>n</u> | _ | Ι. | _ | - | _ | _[| Dat | е | 1 | _ | _ | - 1 | |
| | | Final | ₹ | とない | 9 | 1 | | | 1 | | | | - | | - [| |
| | - | Final | 5 | , 13 | ОУ | 1 | | | | į | | | | | | |
| | f | - | J, | . / | 7 | † | | _ | t | - | | + | + | + | \dashv | - |
| | ı | | 2 | ı | Ť | t | ٦ | | t | | | + | + | + | + | - |
| | | | 3 | | 1 | Ť | | | T | | | Ť | † | \top | 7 | |
| | | | 4 | | I | Ι | | _ | T | | | Ī | | 十 | 7 | |
| | L | | 5 | Ц | - | \perp | | | | | | L | Ι | Ι | | |
| | - | 4 | | 1 | 4 | 1 | _ | _ | 1 | 4 | | L | \perp | 4 | _ | |
| | - | _ | 9 | H | + | ╀ | - | | L | 4 | | <u>Ļ</u> | 1 | 4 | 4 | |
| | - | | 3 9 | ╢ | + | ╀ | \dashv | | H | \dashv | _ | - | + | - - | 4 | |
| | 1 | ti | | H | + | ╁ | \dashv | | ┝ | + | _ | ╀ | + | + | + | |
| | H | 1 | | ₩ | + | ╁ | \dashv | | H | + | - | + | + | 十 | + | |
| | 十 | 12 | 2 | # | Ť | t | + | | H | + | | | + | + | + | |
| | | 1: | 3 | 11 | Ť | T | 7 | _ | T | 1 | _ | \vdash | + | + | + | _ |
| | | 14 | • | | T | Γ | 1 | _ | Γ | 1 | _ | 1 | + | 十 | † | _ |
| | Ľ | 1 | | Ц | 1 | L | I | | | | | | I | T | | |
| | | 16 | | Ц | 1 | L | 1 | | L | 1 | _ | _ | L | \perp | | |
| | - | 17 | - | 7 | + | L | + | | L. | 4 | _ | ļ | Ļ | \downarrow | 4 | _ |
| tag | + | 18 | - | 4 | + | L | + | _ | _ | + | | _ | + | + | + | _ |
| | \vdash | 20 | +- | + | ╀ | | ╁ | - | | + | _ | <u> </u> | ╀ | + | + | - |
| | \vdash | 21 | +- | + | + | - | + | - | - | + | - | _ | ╀ | + | + | \dashv |
| | \vdash | 22 | - | † | t | - | $^{+}$ | \dashv | | + | \dashv | | ╁ | + | + | ᅱ |
| | | 23 | _ | + | T | - | † | 7 | - | + | - | _ | $^{+}$ | ╁ | + | ┪ |
| | | 24 | | T | П | | + | 1 | | Ť | | | 1 | + | T | ┪ |
| | | 25 | | \perp | | | I | | | Ι | | | | I | | |
| | L | 26 27 | L | 1 | Ц | | 1 | 1 | | 1 | | | | | | |
| | L | | | \downarrow | Ц | | \downarrow | 4 | | \downarrow | 4 | | L | 1 | 1 | ↲ |
| | \vdash | 28 29 | | + | Н | _ | + | 4 | _ | ╀ | - | | ┞ | - | \perp | 4 |
| | - | 30 | ┢ | + | \dashv | _ | ╀ | + | | ╀ | + | | - | ╀ | ╀ | \dashv |
| | - | 31 | | H | + | _ | ╁ | + | - | ╁ | + | | ┝ | + | ╁ | ┨ |
| | \vdash | 32 | | 1 | 7 | | ╁ | † | - | ╁ | + | | H | ╁ | + | 1 |
| | Γ. | /33 |) | П | 1 | | 1 | † | | T | 1 | | | T | T | 1 |
| | | 34 | | Ц | \Box | | L | | | L | I | | | | | |
| | Ļ, | 35 | | Ц | 4 | | L | 1 | _ | L | 1 | | | | |] |
| | ." | (36) 37 | | H | 4 | | L | + | _ | Ļ | 4 | _ | | _ | 1 | |
| | - | 38 | | H | + | | - | + | | - | + | - | | ┝ | - | 4 |
| 200 | - | 39 | | - | + | - | ╁ | + | _ | - | + | \dashv | | ┝ | - | ┨ |
| | - | 40 | _ | T | \dagger | | - | † | | - | \dagger | - | | ┢ | - | 1 |
| i | Г | 41 | _ | \vdash | + | | H | \dagger | - | | † | + | | \vdash | \vdash | 1 |
| i | | 42 | | T | + | _ | \vdash | \dagger | _ | - | \dagger | 7 | | - | \vdash | 1 |
| | | 43 | | Γ | Ť | | | T | | | \dagger | 1 | | | \vdash | 1 |
| | | 44 | | | Ι | | | Ι | _ | | T | | | | | 1 |
| | _ | 45 | | | I | | | I | | | Γ | | | | | 1 |
| - | | 46 | _ | L | 1 | _ | | L | 4 | _ | L | _[| | | | |
| - | | 47 48 | 4 | | + | _ | | Ľ | 4 | | 1 | 1 | | _ | | |
| 1 | _ | 48 | - | _ | + | - | | \vdash | + | _ | + | + | - | | | |
| 1 | _ | 50 | - | _ | + | + | | + | + | | - | + | - | \dashv | _ | |
| - | | | _ | | ,_ | _ | | ٠. | _ | | - | | | | | 1 |

| г | | | _ | _ | _ | | | _ | | | | _ | | | | | | | |
|----------|----------|----------|----------|--------------|---|---|---|---|---|---|---|----|-----------|---|---|----------|-----|-----------|-----------|
| 1 | Cla | aim | 1 | _ | _ | _ | _ | _ | _ | _ | D | at | е | _ | | _ | | | |
| | Final | Original | | | | | | | | | | | | | | | | | |
| ſ | | 51 | T | ٦ | | | | 1 | | 1 | _ | 1 | | Ť | | Ť | | r | $^{+}$ |
| | | 52 | I | | | 7 | | 1 | | 7 | | 1 | | Ť | _ | T | | Г | T |
| | | 53 | Γ | | | T | | Ţ | | | | 7 | | T | | Γ | | | T |
| L | | 54 | <u> </u> | | _ | I | | I | | I | | I | | I | | I | | | T |
| L | | 55 | - | 1 | _ | 1 | | 1 | | 1 | | 1 | | 1 | | L | | | Ι |
| L | _ | 56 | - | 4 | _ | 1 | | 1 | | 1 | | 1 | | ┸ | | L | | | |
| L | 4 | 57 | +- | 1 | | 4 | | 1 | | 1 | | 1 | | ļ | _ | L | | | 1 |
| - | 4 | 58 | - | 4 | _ | + | | 4 | | 1 | | 1 | _ | 1 | _ | L | 4 | | \perp |
| \vdash | 4 | 59 | ┞ | + | | + | | ╀ | | + | | + | | ╀ | _ | L | 4 | | + |
| F | \dashv | 60 61 | \vdash | + | _ | + | | + | _ | + | | + | | ╀ | | H | 4 | | + |
| \vdash | + | 62 | ┝ | + | _ | + | | t | - | + | _ | + | _ | + | | H | + | | + |
| \vdash | 7 | 63 | H | + | | t | | t | _ | + | - | + | _ | + | - | H | + | _ | ╁ |
| 1 | + | 64 | H | + | | t | | ł | | t | | t | | ╁ | _ | H | + | - | ╁ |
| r | - | 65 | Н | t | | t | _ | t | | t | - | t | - | t | | - | + | - | t |
| r | | 66 | Т | 1 | | T | | Ť | _ | t | _ | t | | t | | Н | 7 | | T |
| Γ | | 67 | | Ť | | T | _ | T | _ | t | _ | t | _ | T | | _ | Ť | | T |
| | | 68 | | 1 | | T | | Τ | | T | | T | | T | | | 1 | | T |
| | | 69 | | | | Γ | | Γ | | T | | T | | | | | 7 | | |
| | | 70 | | T | | Γ | | | | Γ | | Γ | | | ٦ | | 1 | | T |
| | | 71 | | I | | | | | | Ĺ | | | | | | | 1 | | Г |
| L | | 72 | | | | | | L | | L | | | | | | | 1 | | Г |
| L | - | 73 | | \downarrow | | L | | L | | L | _ | L | | | | | I | | |
| L | | 74 | | Ļ | _ | L | | L | | L | | L | | L | 1 | | 1 | _ | |
| L | | 75 | | ╀ | | L | _ | L | | L | _ | L | _ | L | 4 | | 1 | _ | L |
| H | - | 76 | | + | _ | L | _ | L | - | L | | L | _ | _ | 4 | _ | 1 | _ | _ |
| - | _ | 77 | | ╀ | _ | H | - | _ | _ | L | | L | - | _ | + | _ | + | | <u> </u> |
| H | - | 9 | _ | + | - | H | - | _ | - | H | 7 | - | - | _ | + | | + | | - |
| - | | 30 | - | t | - | H | | - | 7 | Н | - | H | - | | + | | ╀ | _ | _ |
| - | _ | 31 | _ | 1 | 7 | - | 1 | | | - | ٦ | - | 1 | | + | - | t | | _ |
| _ | 1 | 32 | | l | | _ | 7 | | 1 | - | | _ | 1 | | t | _ | t | 7 | |
| | 8 | 3 | | Γ | | | 1 | | 1 | | | _ | | _ | Ť | - | t | | _ |
| | 8 | 4 | | | | | | | | | | | 7 | | T | | T | | _ |
| _ | - | 5 | | L | | _ | 1 | _ | | | | | | | I | | I | | |
| | +- | 6 | | L | _ | _ | 1 | | 1 | | | | 4 | | ļ | | L | | |
| | 8 | _ | _ | _ | 4 | | 1 | | 4 | | 4 | | 4 | _ | 1 | _ | L | _ | |
| | 8 | | _ | _ | 4 | _ | 1 | _ | 4 | | 4 | _ | 4 | | ļ | | L | 4 | |
| | 9 | | - | | + | _ | + | _ | + | | + | | + | | ╀ | _ | L | 1 | |
| _ | 9 | - | 4 | _ | + | _ | + | _ | + | _ | + | _ | + | | Ļ | | - | 4 | _ |
| _ | 9: | | - | | + | | ╀ | | + | _ | + | _ | + | _ | L | - | ļ., | 4 | _ |
| _ | 9: | | \dashv | | + | _ | + | _ | + | | + | | + | _ | - | - | - | + | 4 |
| | 9. | | + | _ | + | - | ╁ | | ╁ | _ | + | - | + | | ├ | - | | + | \dashv |
| | 95 | - 1 | + | | t | - | + | | + | | + | | + | | H | \dashv | _ | + | \dashv |
| | 96 | _ | + | - | t | - | - | - | t | | + | - | \dagger | - | H | + | _ | + | \dashv |
| | 97 | - | + | _ | t | | t | | t | | t | - | t | | - | + | _ | \dagger | \dashv |
| | 98 | | 1 | | t | _ | T | | t | _ | t | _ | t | ٦ | | + | - | t | \dashv |
| | 99 | | | _ | | | | | | _ | Ī | _ | T | | _ | 1 | | † | \exists |
| | 10 | ol_ | I | | | | | | | | | | I | | | 1 | | T | ٦ |

| (a) | | | _ | | | | | | | | _ |
|-------------------|----------|----------|----------|-----------|----------|----------------|----------|-----------|-----|----------|--------------|
| Claim | <u> </u> | - , | | | Da | te | , - | _ | | _, | |
| Final Original | | | | | | | | 1 | | | |
| Final | | | | | | | | | 1 | - | |
| ŒŌ | | _ | _ | | | L | L | | | | |
| 101 102 | | _ | | _ | | | L | | | | |
| 102 | Ш | | | | | | | L | | | |
| 103 | | | | | | | | Τ | T | T | _ |
| 104 105 | | \Box | | | | _ | | | T | 7 | _ |
| 105 | | | | _ | į | D | | | Г | T | _ |
| 106 | | | | | | | | T | Ţ | T | _ |
| 107 | | | | П | | J ₂ | | Π | Τ | \top | _ |
| 108 | Т | T | П | | | | Г | Γ | T | 7 | _ |
| 109 | П | | | | | _ | | | T | 7 | _ |
| 110 | | П | | 丁 | | | - | T | T | 十 | _ |
| 111 | T | \top | 7 | \exists | | 1 | - | Τ | Ť | † | |
| 112 | | 7 | 寸 | T | | | _ | \vdash | + | + | - |
| 113 | 十 | \top | \dashv | \top | - | T | | 1 | † | + | - |
| 114 | \top | + | \dashv | \top | \dashv | 7 | > | | t | + | - |
| 115 | _ | \dashv | + | \dashv | 1 | d | D | | + | + | - |
| 116 | 十 | + | + | + | - | 1 | - | ┝ | t | + | - |
| 117 | + | + | + | + | + | ď | T | \vdash | ╁ | + | - |
| 118 | + | ╁ | + | + | + | - | _ | H | ╁ | + | - |
| 119 | + | + | + | + | + | | | - | ╁ | + | |
| 120 | + | + | + | + | + | - | Ö | - | ╀ | ╀ | _ |
| | - | - | + | - - | 4 | - | \dashv | 1 | L | 1 | _ |
| 121 | | - - | + | | 4 | -1 | | ١. | L | 1 | _ |
| 122 | - | + | 4 | - | 4 | _ | | • | L | ┵ | |
| 123 | _ | \perp | 4 | 4 | 4 | _ | \dashv | | L | L | _ |
| 124 | \perp | 4 | 4 | _ | 1 | _ | | | L | L | |
| 125 | _ | _ | \perp | \perp | 1 | _ | _ | | _ | \perp | |
| 126 | \perp | _ | _ | | 4 | _ | | | L | \perp | |
| 127 | + | \perp | \perp | 4 | 4 | _ | 4 | | L | \perp | |
| 128 | 4 | 1 | \perp | \perp | ┵ | ┙ | | | L | L | _ |
| 129 | _ | | \perp | \perp | \perp | | | | | | _ |
| 130 | \perp | L | \perp | | | | 1 | | | 1 | |
| 131 | \perp | | | | | _L | | | | | |
| 132 | | | | | | | | | | Г | |
| 133 | | | | | Γ | | | | | Γ | _ |
| 134 | | \perp | L | | I | | | \neg | | Г | |
| 135 | | | | | | Т | Т | T | | Γ | |
| 136 | \perp | | | T | Τ | | | | | Γ | |
| 137 | | I^{-} | Γ | Τ | | | 7 | \exists | | Γ | - |
| 138 | \perp | Ι | Τ | T | T | 1 | 7 | | _ | Γ | j |
| 139 | T | T | T | T | Τ | 1 | 1 | 7 | _ | \vdash | 1 |
| 140 | Т | | T | \top | T | \top | + | \dashv | | 1 | 1 |
| 141 | 1 | + | 1- | +- | $^{+}$ | + | + | $^{+}$ | | - | 1 |
| 142 | +- | + | ╁╴ | +- | + | + | + | + | _ | - | 1 |
| 143 | +- | t | + | + | + | + | + | + | | <u> </u> | \mathbf{I} |
| 144 | + | +- | + | +- | + | + | + | \dashv | | | 1 |
| 145 | + | + | +- | + | ╁ | + | + | \dashv | | <u> </u> | 1 |
| 146 | + | +- | +- | + | + | + | + | + | 4 | | 1 |
| 147 | + | ┝╌ | + | ╁ | + | + | + | + | - | _ | 1 |
| 148 | + | - | - | + | - | + | + | + | _ | _ | 1 |
| 149 | + | +- | - | - | - | + | + | + | 4 | | l |
| 150 | +- | - | - | \vdash | \vdash | - | + | + | - | | |
| 1130 | 4 | | 1. | .1 | 1 | 1 | - 1 | - | - 1 | | ı |

If more than 150 claims or 10 actions staple additional sheet here

(LEFT INSIDE)